1,095,331

PATENT SPECIFICATION

DRAWINGS ATTACHED

1,095,331

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Int. Cl.:—G 02 b 5/08

COMPLETE SPECIFICATION

Improvements relating to Rear View Mirrors

We, DESMO LIMITED, a British Company of, 45 College Road, Perry Barr, Birmingham 22, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement: —

This invention relates to rear-viewing mirrors for motor vehicles in which there is a mirror head comprising a casing covering the back of the mirror glass.

The present invention consists in a mirror head of a motor vehicle rear view mirror comprising a mirror glass and a casing made as a moulding in transparent plastics and provided with a reflecting surface finish as by vacuum deposition on its interior surface so as to present a bright appearance to the outside through the transparent plastics.

A suitable transparent plastics is methyl methacrylate polymer.

An embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which,

Figure 1 is a vertical section of a mirror head according to the present invention.

Figure 2 shows the lower part of Figure 1 on a larger scale.

The mirror head comprises a mirror glass 3 which is mounted in a transparent plastics casing 4. The casing 4 is made as a moulding in methyl methacrylate polymer and is shaped so that it and the mirror glass 3, which is shown slightly outwardly convex but may be flat, define a cavity 5. The interior of the casing 4 is provided with a reflecting surface finish by silvering 18, Figure 2, as by vacuum deposition so as to present a bright appearance to the outside through the transparent plastics.

For durability the back, that is to say the interior surface of the silvering 18 of the moulded casing, is protected against atmospheric attack by a coating 6, Figure 2, which may be any coating, such as paint having a high metallic content, suitable as a protective coating for mirror silvering, to which the silvering 18 and plastics moulding material is inert and for which the method of application will not harm the silvering or plastics moulding material. The mirror glass silvering is also protected in the usual way by a suitable coating, not shown. The silvering 18 of the casing and the protective coating 6 have been somewhat exaggerated in Figure 2.

The mirror glass is retained in the casing by a ring 7 of extruded flexible plastics material, a suitable material being polyvinyl chloride, which ring 7 is fitted around the periphery of the mirror glass and is arranged to positively engage the rim of the casing. As more clearly shown in Figure 2, the ring 7 has a channel shaped inner portion 8 which straddles the edge of the mirror glass and has on its outer portion a forwardly inclined, outwardly directed lip or rib 9 which is adapted to engage in a groove 10 around the inner surface of the rim of the casing. The ring 7 is fitted around the periphery of the mirror glass before the mirror glass is fitted into the mouth of the casing. The flexibility of the ring material enables it to be easily fitted around the mirror glass. As the mirror glass is inserted in the mouth of the casing the lip or rib 9 of the ring is deflected and then springs out to engage in the groove 10 to retain the mirror glass in the casing. This means of retaining the mirror in the casing is the subject of Patent Application 17240/64 (Serial No. 1,095,332) which also described modifications suitable for a mirror according to the present invention. The ring is a good fit around the mirror glass and with the casing rim and this with the application of a suitable sealing compound between the ring and the mirror glass and the ring and the casing rim affords an hermetic seal between the mirror glass and casing rim.

Apertures through the casing are avoided or themselves sealed.

The mirror head is provided with a bolt

[*Price 4s. 6d.*]

11 for connecting it to an arm or other support, not shown, for mounting on a vehicle. The bolt 11 has an enlarged head 12 located inside the casing 4 and a D-section shank 13 which passes out of the casing through an aperture 14 in the back of the casing. The portion of the casing bordering the aperture 14 is domed and so is the rear face of the bolt head 12. Between the casing and head 12 a domed disc 15 is interposed, being secured to the casing by a suitable adhesive and sealing compound and providing a bearing surface for the head 12. A flat closure disc 16 extends over and is hermetically sealed at its edge to a peripheral flange 17 of the domed disc so as to define with the concave inner surface of the domed disc a cavity in which the bolt head 12 is enclosed. Thus the domed portion of the casing housing the bolt head, and the aperture 14, is sealed off from the rest of the casing interior. The doming of the casing, disc 15 and bolt head enables the mirror head to be adjustably swivelled to set the mirror head as required for use.

If desired a plastics foam producing material or materials may be put into the cavity 5 in the mirror head which on foaming fills the cavity and adheres strongly to the protective coating 6. An example of a suitable filling material is polyurethane foam which may be resilient but is preferably rigid. Such a filling provides additional protection for the silvering of the casing and of the mirror. This filling of the cavity between the mirror glass and casing of a mirror head is the subject of Patent Application No. 27562/62 (Serial No. 1,034,106).

When a filling is put into the cavity the ring 7 may be modified in that the lip or rib 9 need not be provided, and in consequence the groove 10 need not be formed in the casing rim, since the adhesion of the filling to the mirror glass will be quite adequate to securely retain the mirror glass in the casing.

WHAT WE CLAIM IS:—

1. A mirror head of a motor vehicle rear view mirror comprising a mirror glass and a casing made as a moulding in transparent plastics and provided with a reflecting surface finish as by vacuum deposition on its interior surface so as to present a bright appearance to the outside through the transparent plastics.

2. A mirror head according to Claim 1 wherein the casing is a moulding in methyl methacrylate polymer.

3. A mirror head according to any preceding claim wherein the interior surface of the reflecting surface has a coating to protect the inner side of the reflecting surface against atmospheric attack.

4. A mirror head according to any preceding claim wherein the moulding and mirror glass are hermetically sealed around the rim, apertures through the casing being avoided or themselves sealed.

5. A mirror head of a motor vehicle rear view mirror substantially as described herein with reference to, and as illustrated by, the accompanying drawings.

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1 SHEET *This drawing is a reproduction of the Original on a reduced scale*

FIG. 1.

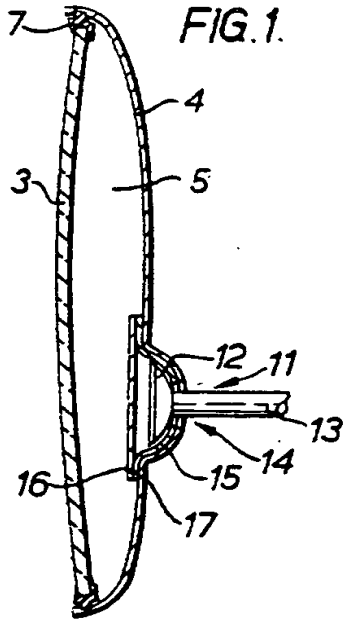

FIG. 2.

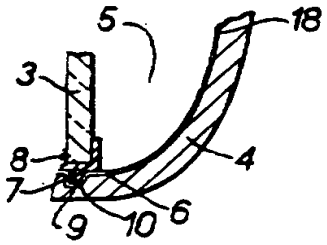

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FIG. 1.

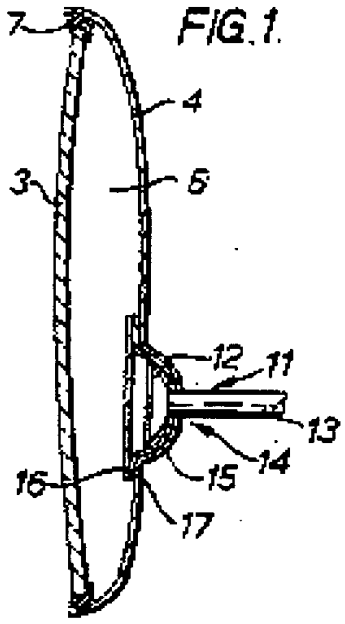

FIG. 2.